

ABSTRACT

The invention relates to a reception arrangement for receiving multicarrier symbols, each multicarrier symbol (S_1, S_2, S_3) comprising a plurality of single carrier symbols, each symbol modulating a respective carrier frequency (f_1, f_2, f_3).

- 5 The single carrier symbols are transmitted simultaneously. The arrangement comprises means for detecting phase error of each single carrier and means for correcting the phase of a sampling clock (52) in view of the estimated error.

The means for estimating phase error comprise means (58₁ ... 58_N, 24, 40) for determining a parameter $\hat{\epsilon}_i$ for a carrier f_i according to the following formula:

$$10 \quad \hat{\epsilon}_i = E[r_{k-1}^i a_k^{i*} - r_k^i a_{k-1}^{i*}] \quad (3)$$

- wherein r_k^i is the detected signal for the single carrier at a time t , a_k^i is the corresponding symbol at the same time t , a_{k-1}^i and r_{k-1}^i correspond, respectively, to a_k^i and r_k^i at time $t-NT$, NT being the duration of transmission of a multicarrier symbol, and $E[\]$ means an average value on several successive symbols.
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